



ASIAN BIO-NET

**Third Coordination Meeting on Capacity-
Building in Biosafety
Lusaka, 26-28 February 2007**



Regional Project on Capacity Building in Biosafety of GM Crops in Asia (GCP/RAS/185/JPN)

**Andrea Sonnino
FAO - Research and Extension Unit
Natural Resources Management and
Environment Department – Rome, Italy**

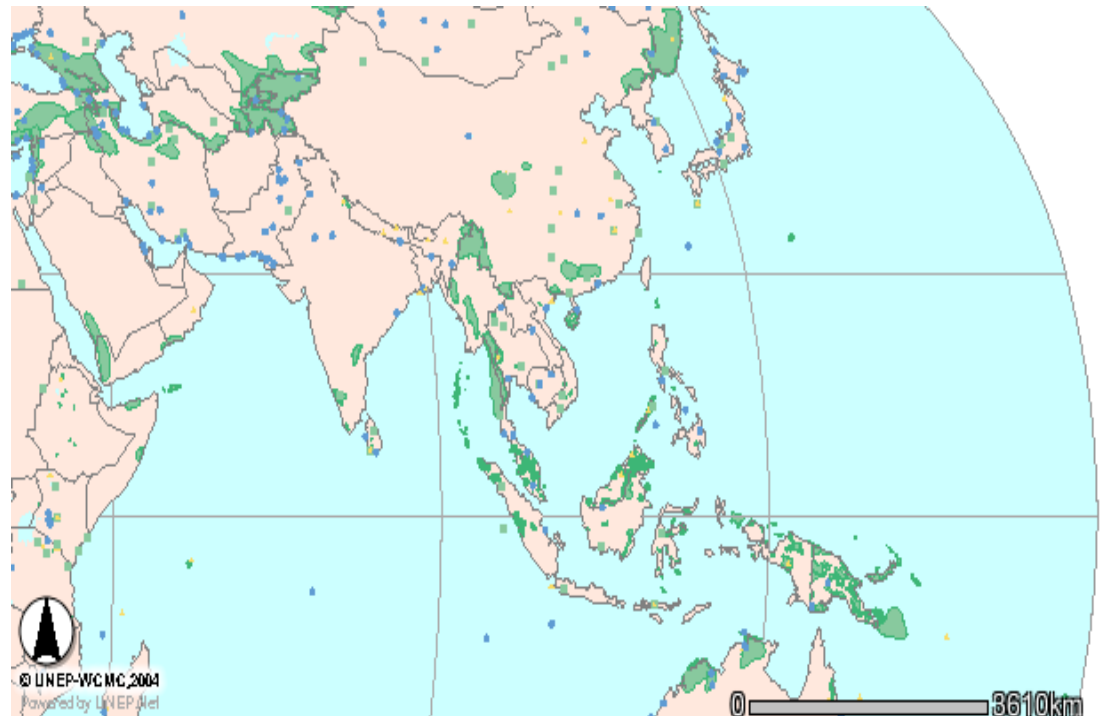


ASIAN BIO-NET



The context

- Home to nearly 60 percent of the world's people.
- Homeland of many cultivated species (centers of origin)
- Most Asians depend largely on agriculture
- Record gains in productivity underpinned economic prosperity
- About 1/6 of Asians undernourished (2/3 of the global no.)
- Limited availability of extra arable land
- Important biotechnology advancements





ASIAN BIO-NET

The mandate



- **The 25th FAO Regional Conference for Asia and the Pacific, Yokohama, Japan, 2000**
 - noted that countries were encouraged under the Cartagena Protocol to establish mechanisms for assessing and managing the potential environmental risks associated with GMOs,
 - recommended that “FAO provide capacity building support to developing countries in this endeavor”,
 - invited international donors to provide the necessary financial support for this work.



- **The Japanese Government pledged to provide financial support**



ASIAN BIO-NET

The project



- **Duration: 3 years (2002 - 2005)**
- **Budget: US\$ 1,120,819**
- **10 participating countries: Bangladesh, China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam**
- **Host country: Thailand**





ASIAN BIO-NET

Overall objective



- **To enhance food and livelihood security in Asia through sustainable and environmental-friendly increase in yield and quality of agricultural produce, including, where appropriate, the safe and judicious harnessing of modern biotechnology.**





ASIAN BIO-NET

Specific objectives



- To assist countries in the region in safe harnessing of the benefits of biotechnology
- To establish and strengthen technical cooperation among Asian countries
- To build capacities to ensure the safe introduction and use of GM crops
- To develop and harmonize appropriate regulatory frameworks
- To collect, analyse, disseminate and exchange information





ASIAN BIO-NET



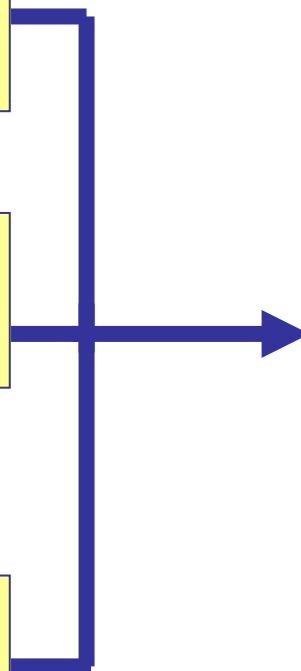
Rationale

**Contributing to national
biosafety capacity
building**

**Establishing an Asian
Network on Biosafety**

**Promoting biosafety
research**

**Regional collaboration
and harmonization of
biosafety measures**





ASIAN BIO-NET

Strengthening of biosafety national capacities

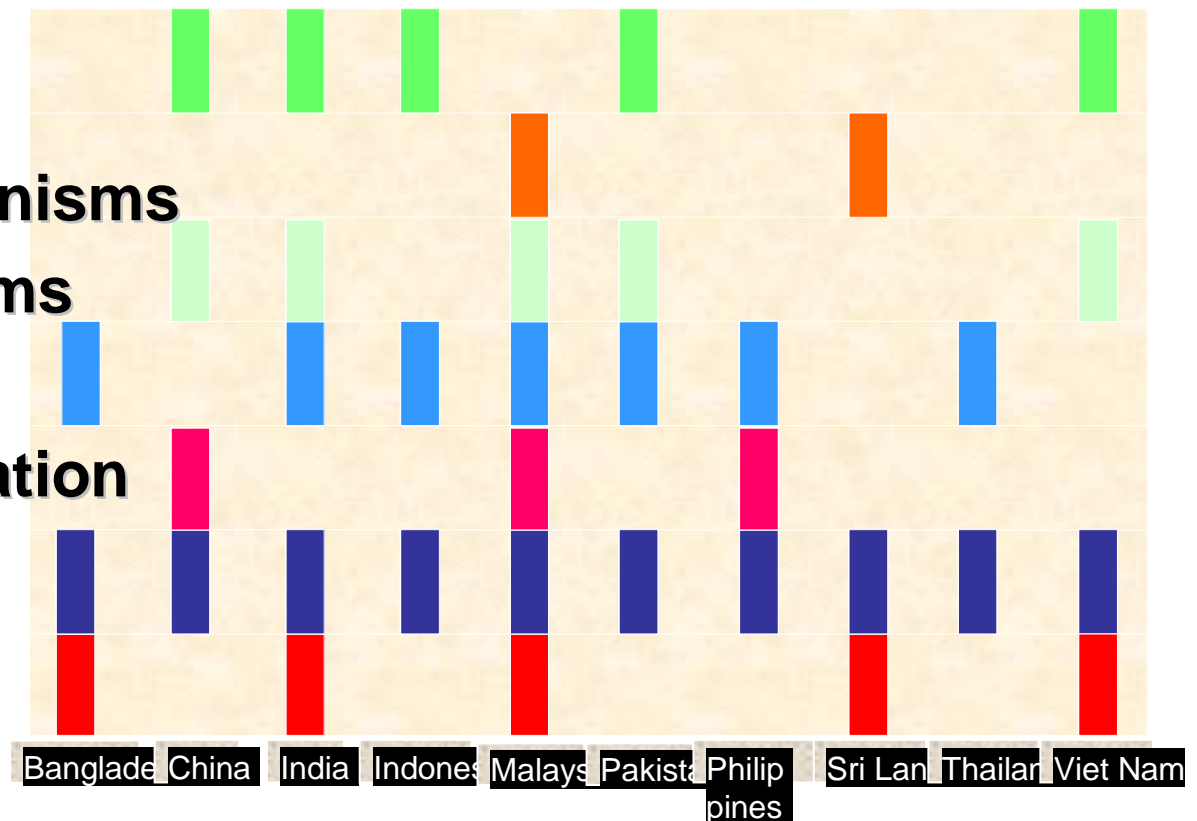


- **Benchmark Document on the Needs and Present Status of the Capacity Building in Biosafety of GM Crops in Asia**
 - Edited by Prof. Anupam Varma, New Delhi
 - Discussed in a regional workshop
 - Revised by participating countries
 - Published in October 2004





- **Human resources**
- **Infrastructures**
- **Regulatory mechanisms**
- **Policy and programs**
- **Funding**
- **Regional collaboration**





ASIAN BIO-NET

Strengthening of biosafety national capacities



- **9 National Stakeholder Workshops (one in each country)**

- **focused on identified national training needs**
- **a total of 431 trainees from regulatory bodies, scientists, NGOs, private sector**





ASIAN BIO-NET

Establishment of an Asian Network for Harmonizing Biosafety



- 4 Annual Steering Committee and Technical Expert Group Meetings
- 2 Regional Consultations to develop harmonization of biosafety measures and regulations



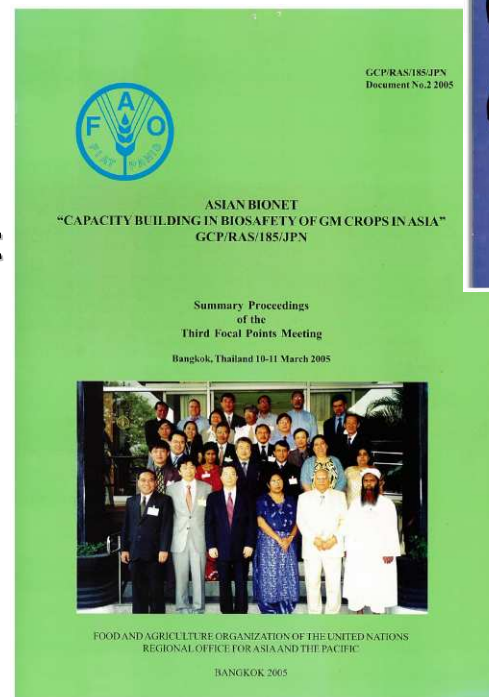
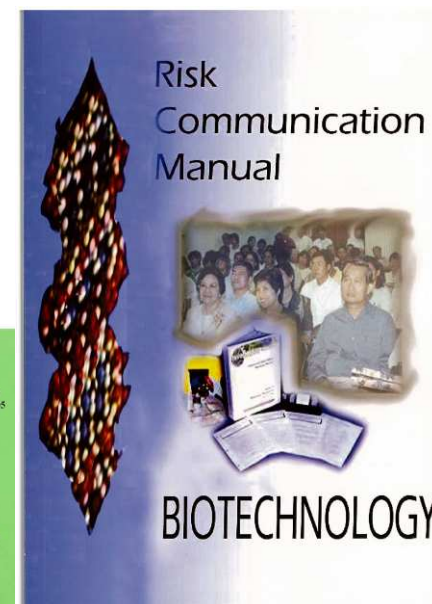


ASIAN BIO-NET

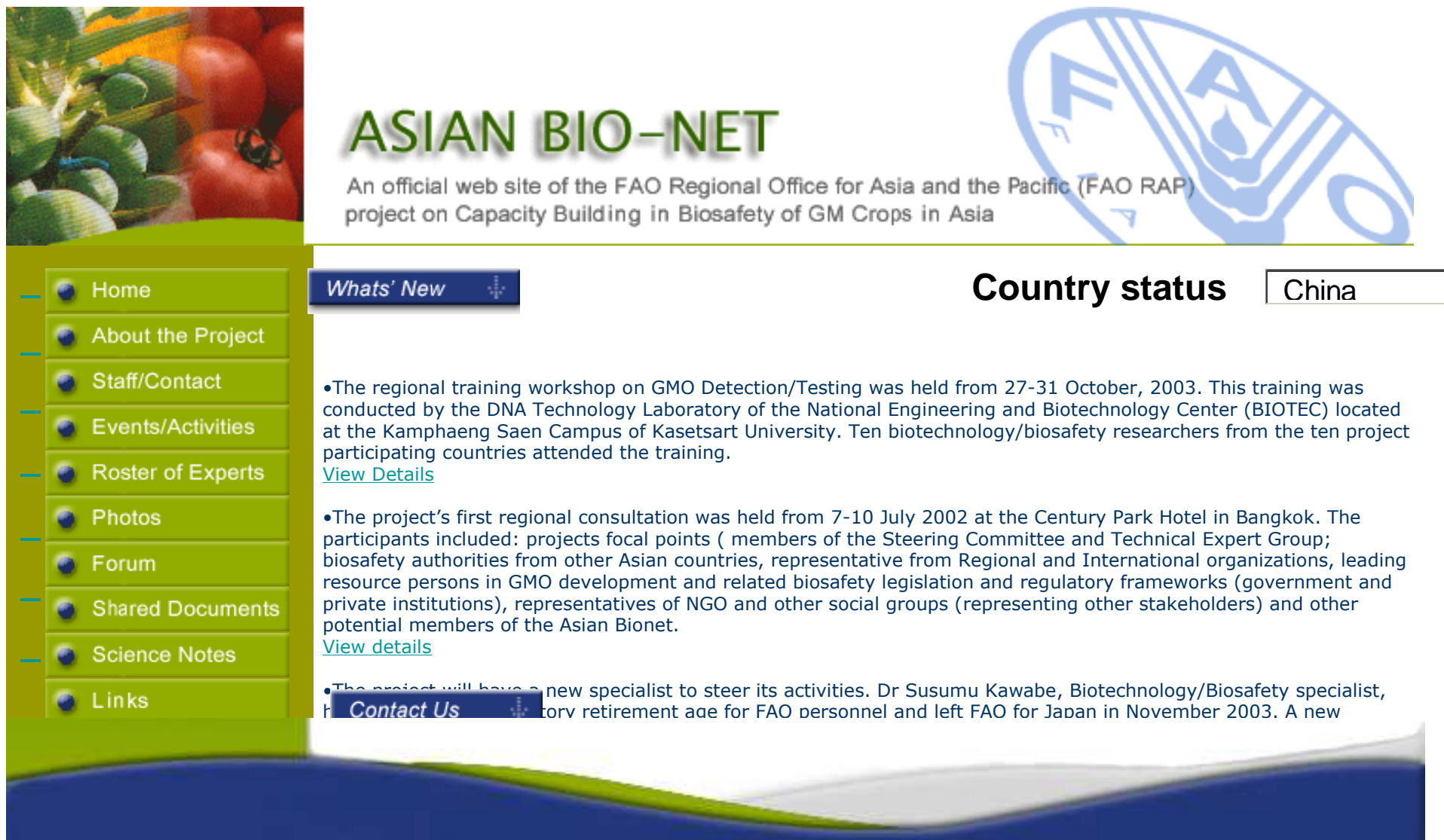
Establishment of an Asian Network for Harmonizing Biosafety



- **Internet site for biosafety aspects of GM crops**
 - Status of biosafety in participating countries
 - Resource documents (benchmark document, training manuals, etc.)
 - Information related to project activities (proceedings of meetings and workshops)
 - Photo gallery
 - Useful links



The project's website



The screenshot shows the ASIAN BIO-NET website. The header features a banner with a green and red vegetable image on the left, the text "ASIAN BIO-NET" in green, and a description of the project as an official web site of the FAO Regional Office for Asia and the Pacific (FAO RAP) project on Capacity Building in Biosafety of GM Crops in Asia. A large, faint FAO logo is in the background. Below the banner is a navigation menu on the left with links: Home, About the Project, Staff/Contact, Events/Activities, Roster of Experts, Photos, Forum, Shared Documents, Science Notes, and Links. To the right of the menu is a "Whats' New" section with a list of recent events and a "Country status" section showing "China".

ASIAN BIO-NET

An official web site of the FAO Regional Office for Asia and the Pacific (FAO RAP) project on Capacity Building in Biosafety of GM Crops in Asia

- Home
- About the Project
- Staff/Contact
- Events/Activities
- Roster of Experts
- Photos
- Forum
- Shared Documents
- Science Notes
- Links

Whats' New

- The regional training workshop on GMO Detection/Testing was held from 27-31 October, 2003. This training was conducted by the DNA Technology Laboratory of the National Engineering and Biotechnology Center (BIOTEC) located at the Kamphaeng Saen Campus of Kasetsart University. Ten biotechnology/biosafety researchers from the ten project participating countries attended the training.
[View Details](#)
- The project's first regional consultation was held from 7-10 July 2002 at the Century Park Hotel in Bangkok. The participants included: projects focal points (members of the Steering Committee and Technical Expert Group; biosafety authorities from other Asian countries, representative from Regional and International organizations, leading resource persons in GMO development and related biosafety legislation and regulatory frameworks (government and private institutions), representatives of NGO and other social groups (representing other stakeholders) and other potential members of the Asian Bionet.
[View details](#)
- The project will have a new specialist to steer its activities. Dr Susumu Kawabe, Biotechnology/Biosafety specialist, h
[Contact Us](#)

Country status

China



ASIAN BIO-NET

Promoting biosafety research



- **Regional training activities in risk assessment, risk communication and GMO detection**
 - GMO detection, Thailand 2003
 - Public awareness and participation and IPR, Philippines, 2004
 - Risk assessment and management, Japan, 2005
- **Publication of manuals, reports and other resource materials**





ASIAN BIO-NET

Problems and lessons learned



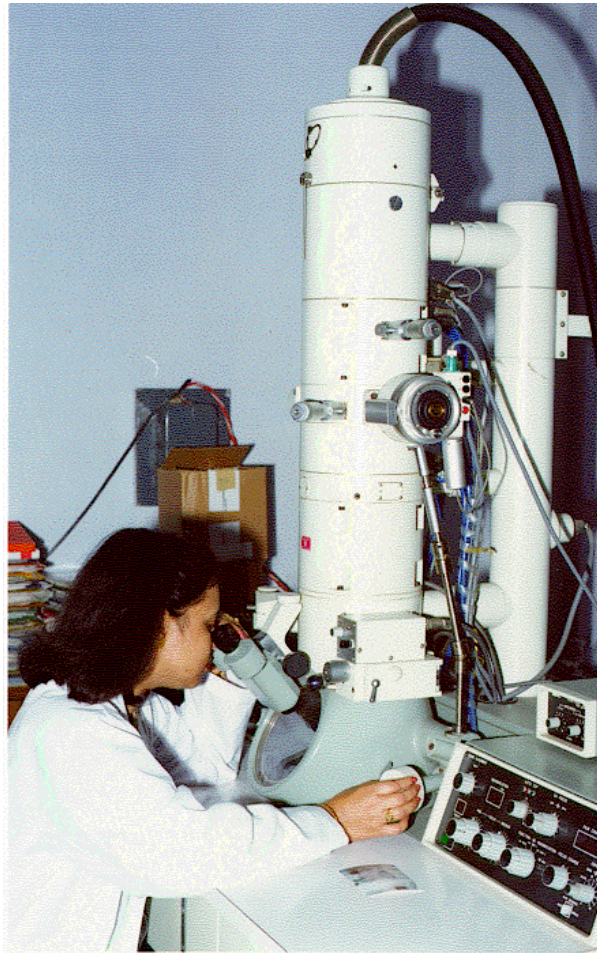
- **Bureaucratic requirements = slow start**
- **Need to complement national – regional dimensions of biosafety capacity building**
- **Need to coordinate with**
 - National projects
 - projects of other agencies
- **Non-homogeneous national capacities = limitation and opportunity**
- **Need for extension**
 - New participating countries
 - Second project





ASIAN BIO-NET

Conclusions of the final regional consultation



- Asian Bio-Net effectively assisted participating countries
- New challenges require renewed efforts
- Responsibility of biosafety-related decision-making rests on national authorities
- Need to strengthen national biosafety systems
- Regional collaboration offers important opportunities
- FAO requested to formulate and seek funding for a second project



ASIAN BIO-NET

Weaknesses of biosafety systems in Asia



- **Biotechnology policy absent in some countries**
- **Regulatory frameworks missing or incomplete in some countries**
- **Institutions often weak and dispersed**
- **Properly trained human resources still insufficient**
- **Public information and participation uneven but generally inadequate**





ASIAN BIO-NET

Challenges to the biosafety systems in Asia



- **Basic knowledge incomplete or insufficient**
- **Complex and diverse ecosystems (Centers of origin)**
- **New GMOs**
- **Locally developed GMOs**
- **Cost of regulation**





ASIAN BIO-NET

Main components of the new project



1. Strengthening regional collaboration

- a) Institutionalizing and expanding Asian Bio-Net (Cambodia, Lao PDR, Myanmar and R. of Korea)
- b) Internet-based information sharing
- c) Identifying needs and priorities

2. Enhancing human capacities

- a) Regional training courses
- b) Training materials



ASIAN BIO-NET

Main components of the new project



3. **Promoting technical coordination**
 - a) **Harmonized technical guidelines and protocols**
 - b) **Network of laboratories**
4. **Promoting public awareness and participation**
 - a) **Development of good practices and regional strategies for biosafety communication**
 - b) **Neutral forum for open discussions**





ASIAN BIO-NET

**Thank you for your
attention**

